

Fig. 1

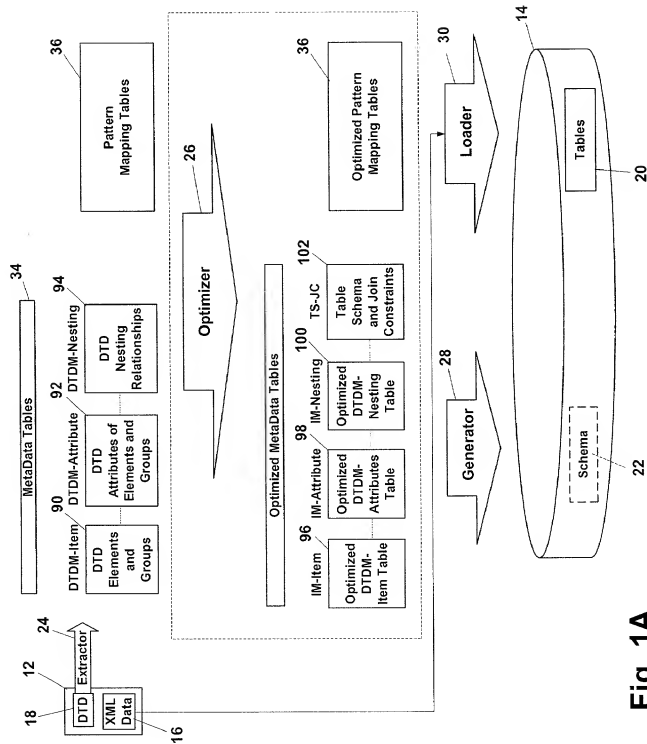


Fig. 1A

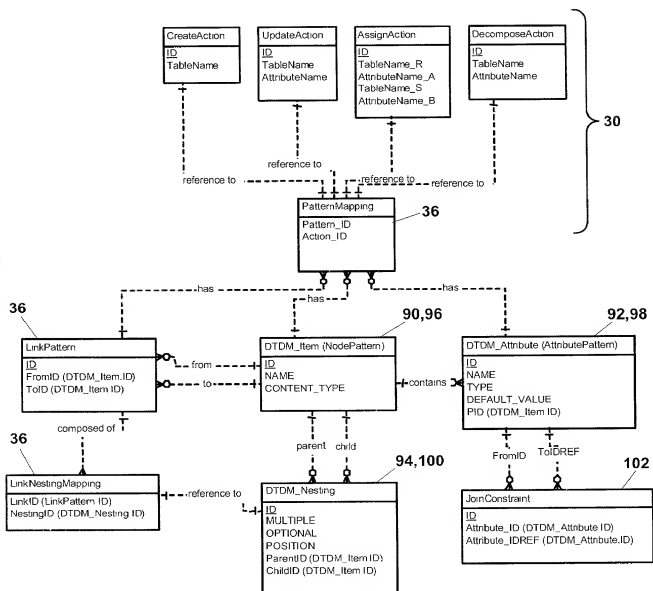


Fig. 1B

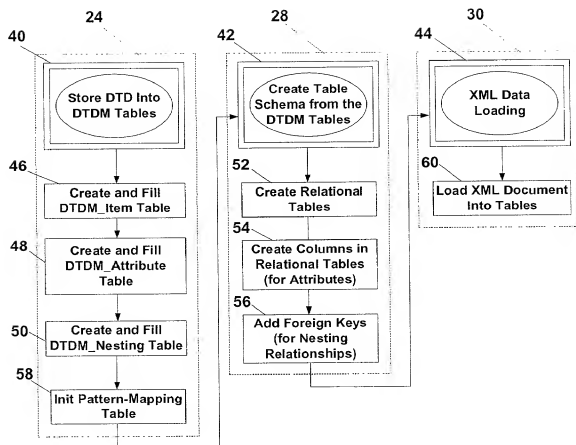


Fig. 2

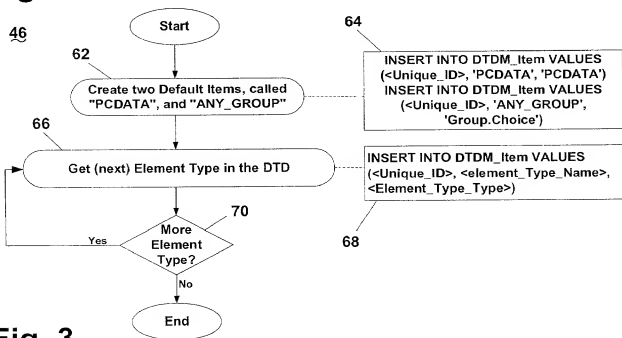


Fig. 3

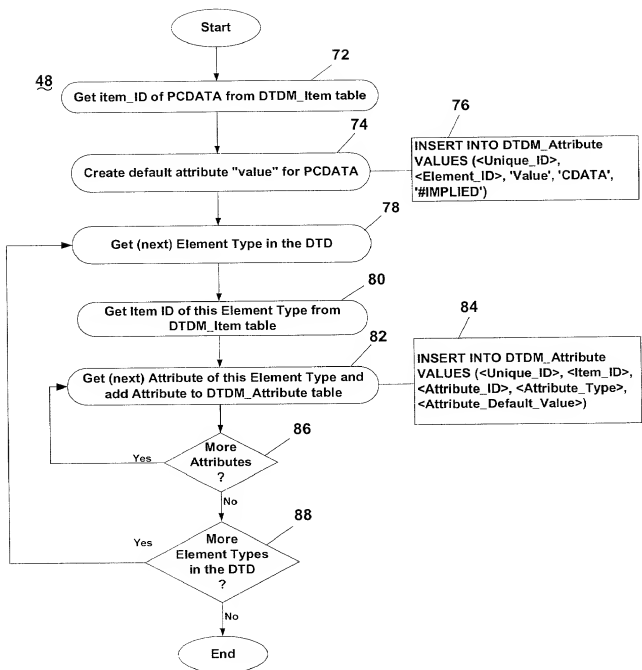


Fig. 4

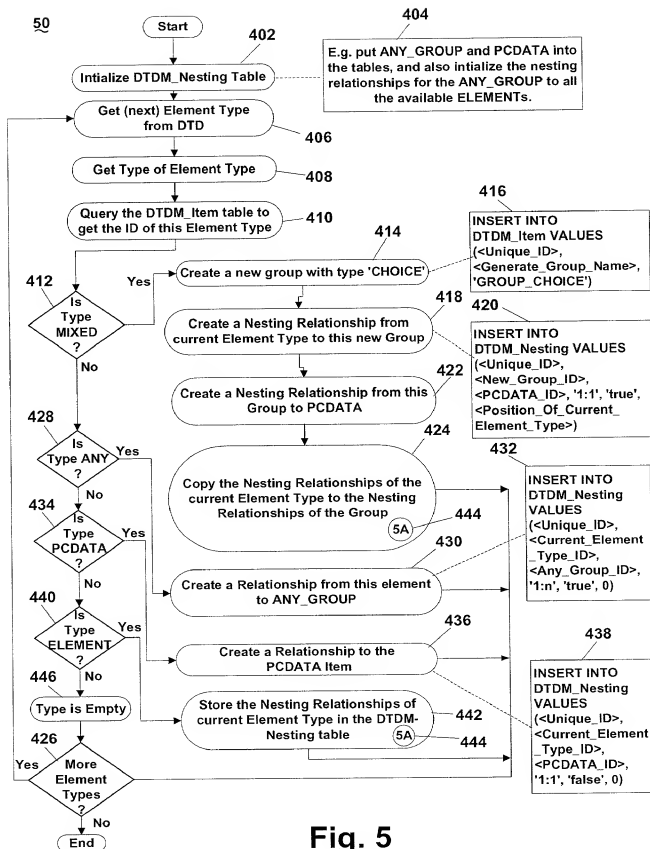


Fig. 5

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graph TD
    Start([Start 444]) --> Decision446{Copy Nesting Relationships of the Parent Item into the Group? 446}
    Decision446 -- No --> Process450([Query the DTDM_Item table to get the ID of the Parent Item as element_id. 450])
    Process450 --> Process452[SELECT ID FROM DTDM_ITEM WHERE Name = <name> 452]
    Decision446 -- Yes --> Process448([Treat Group ID as element_id. 448])
    Process448 --> Process454([Get (next) reference of this Element Type or Group 454])
    Process454 --> Decision458{Is this Child a GROUP? 458}
    Decision458 -- Yes --> Process460([Define a New Group for this Child with a new group ID, and stored as ref_id. 460])
    Decision458 -- No --> Process462([Get Child Item ID and stored as ref_id 462])
    Process460 --> Process444([Recursively Copy Nesting Relationships of the Child into the newly created Group. (5A) 444])
    Process462 --> Process444
    Process444 --> Process464([Store the Nesting Relationship between current Child and the Parent into the DTDM_Nesting Table. 464])
    Process464 --> Decision468{Any more Children? 468}
    Decision468 -- Yes --> Process454
    Decision468 -- No --> Stop([Stop 466])
  
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Fig. 5A

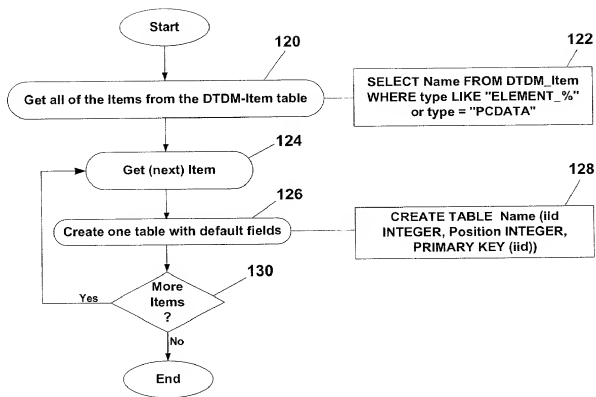


Fig. 6

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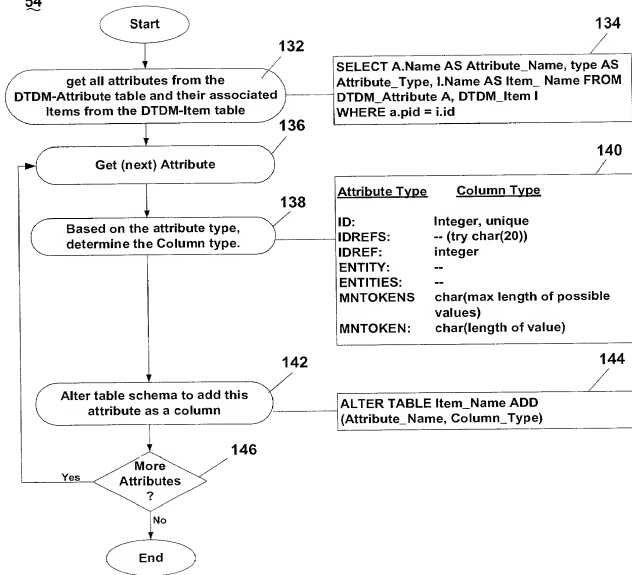


Fig. 7

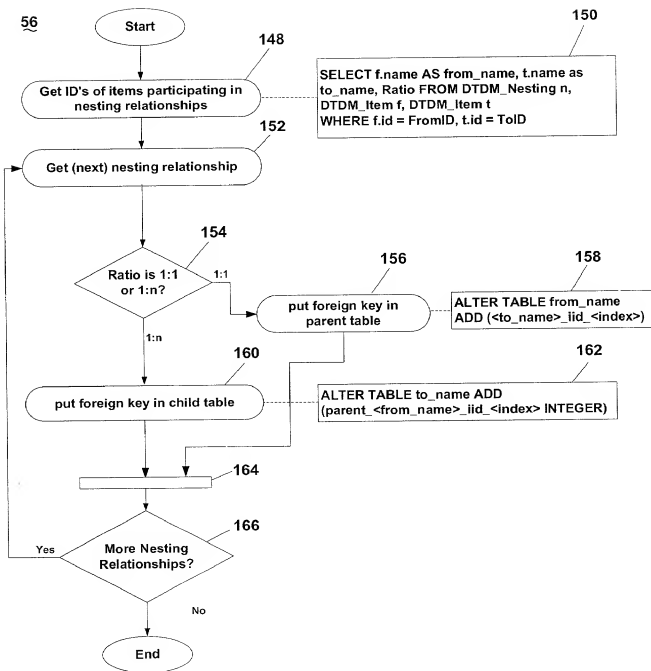


Fig. 8

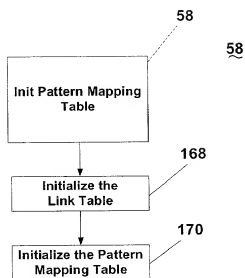


Fig. 9

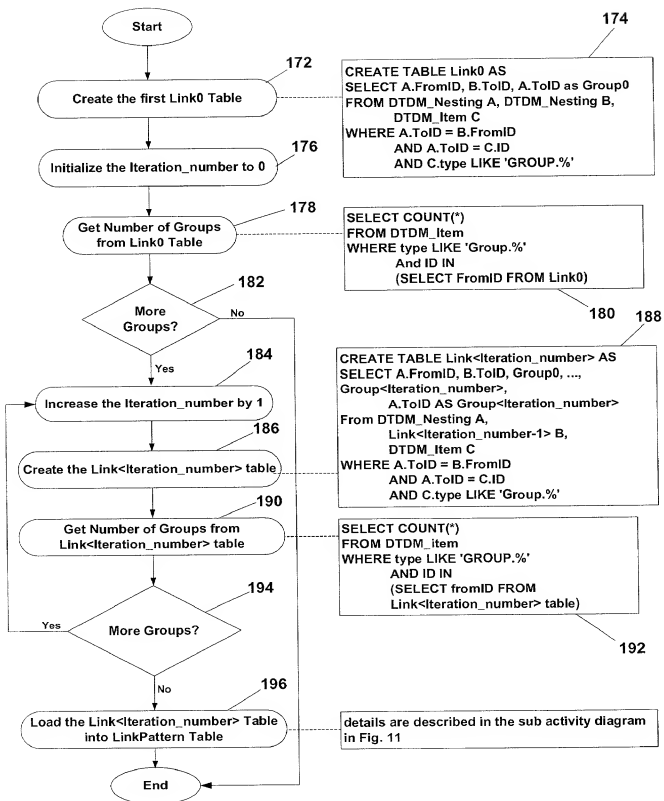


Fig. 10

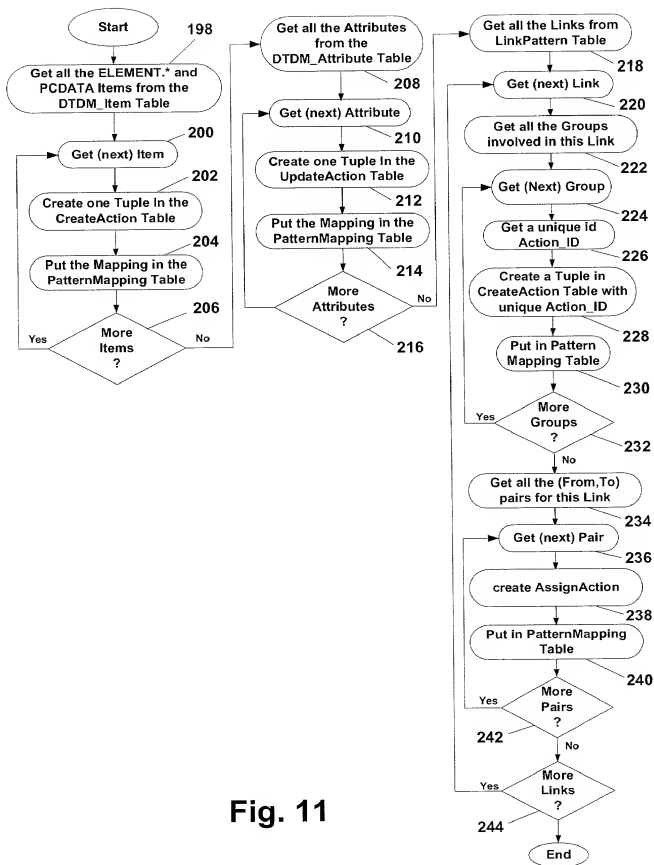


Fig. 11

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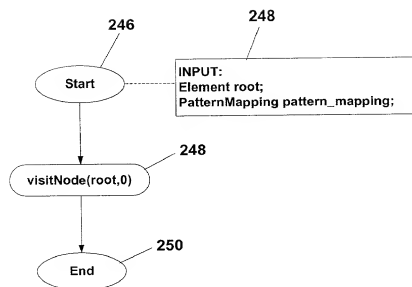


Fig. 12

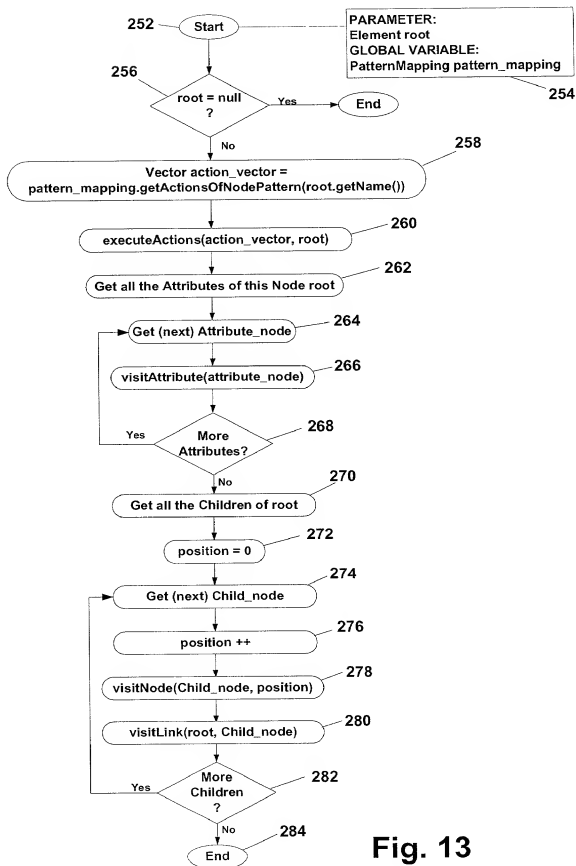


Fig. 13

